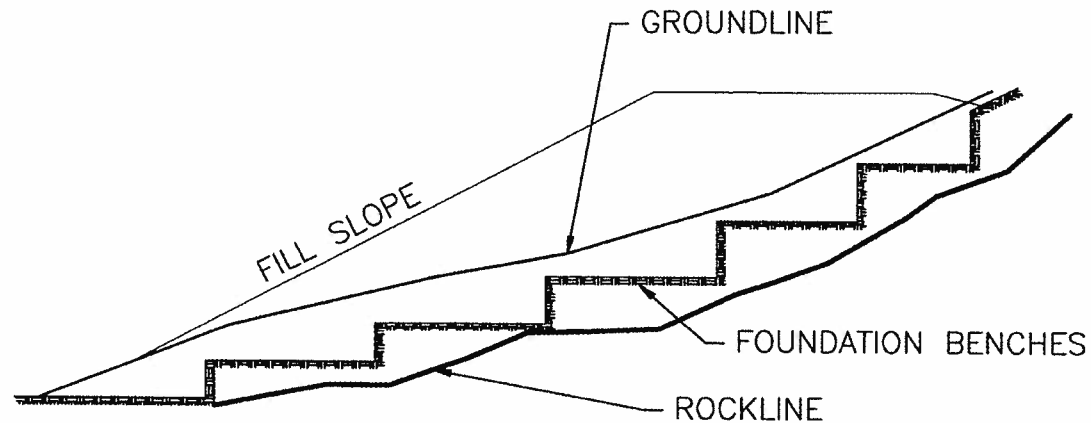
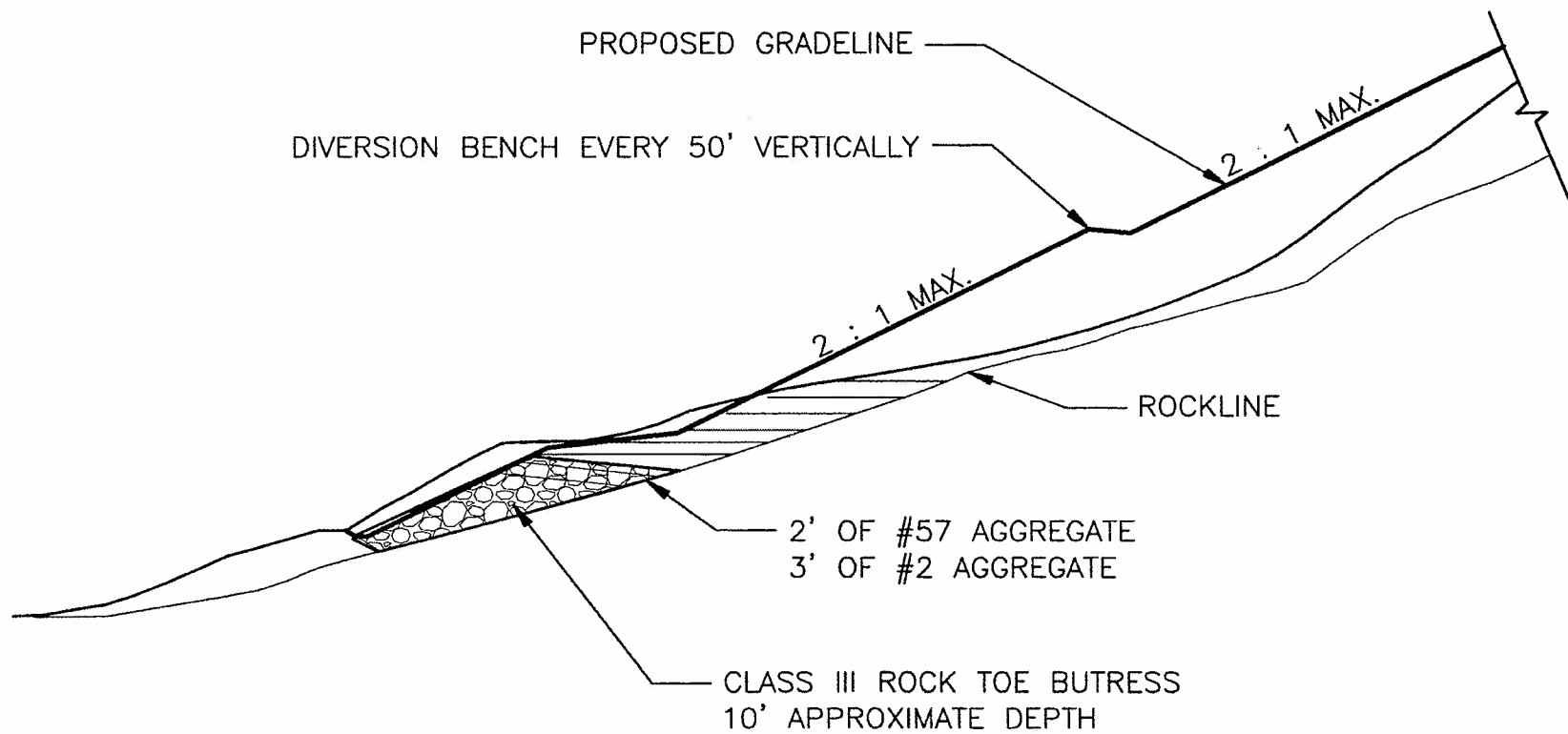


MISCELLANEOUS

DRAWINGS



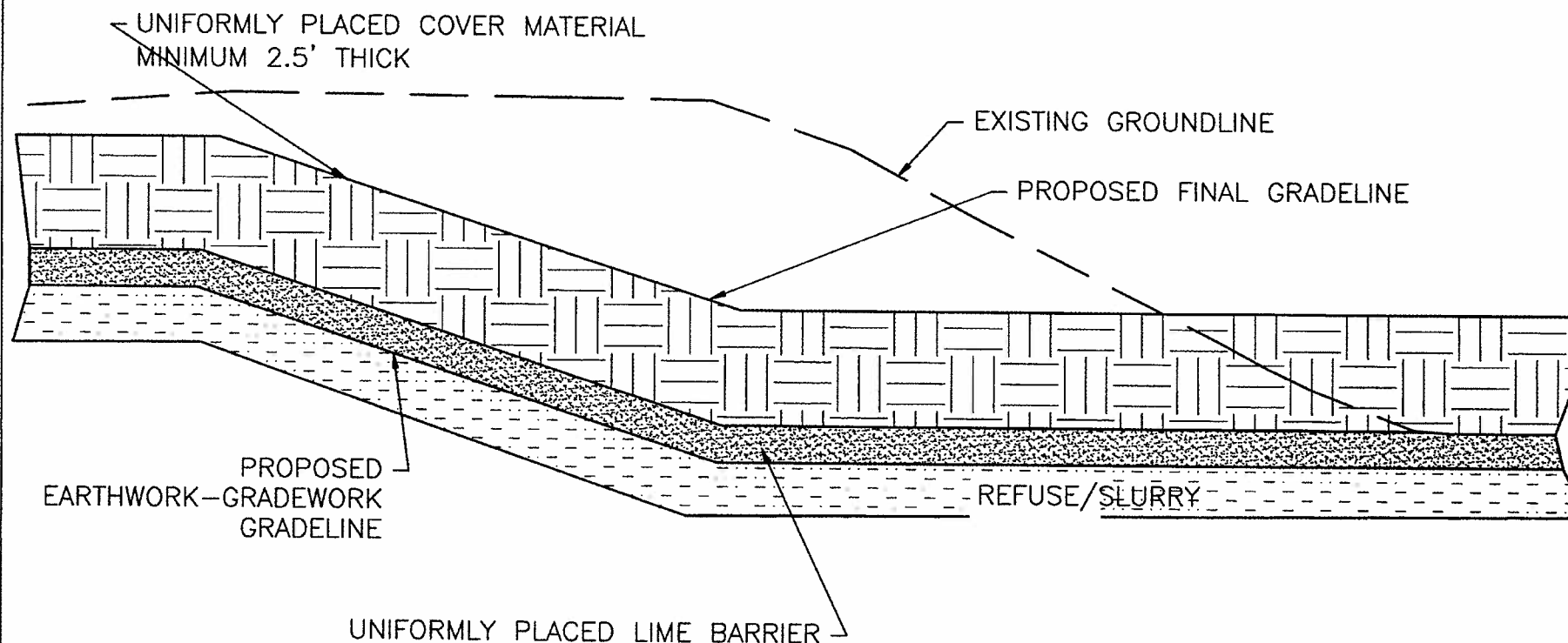
1. THIS TREATMENT FOR EMBANKMENT FOUNDATION BENCHES AS INDICATED ON THIS SHEET, SHALL BE ACCEPTED AS GUIDES, HOWEVER, ALL THE CONDITIONS THAT WILL BE ENCOUNTERED CANNOT BE SHOWN, SO THE DESIGNER MUST GIVE CONSIDERABLE THOUGHT TO THE LOCATION AND DIMENSIONS OF THESE BENCHES.
2. DEFINITE DESIGN INFORMATION CANNOT BE ESTABLISHED AS TO SIZE OF THESE BENCHES, DUE TO IRREGULARITIES AND THE DIFFERENT RATES OF INCLINE OF THE EXISTING CROSS SECTION. HOWEVER, IT IS GENERALLY BELIEVED THAT A 6' TO 12' RISE AND A 20' TO 35' HORIZONTAL RUN ARE FAIRLY TYPICAL WITH A 15' HORIZONTAL RUN BEING THE MINIMUM.
3. WHEN THE INCLINE OF THE CROSS SECTIONS IS 15% OR GREATER THESE EMBANKMENT FOUNDATION BENCHES SHALL BE CONSTRUCTED IN THE ORIGINAL SLOPE AS THE EMBANKMENT IS CONSTRUCTED IN COMPACTED LAYERS OR LIFTS.
4. WHEN EMBANKMENT FOUNDATION BENCHES ARE SHOWN ON THE CROSS SECTION, THE VOLUME SHALL BE INCIDENTAL.
5. NO QUANTITIES WILL BE ALLOWED FOR THE REFILLING OF THESE BENCHES, SINCE SUPPOSEDLY; THE MATERIAL THAT WAS EXCAVATED WILL BE PROCESSED AND PLACED BACK IN THESE BENCHES.



SLOPE RECONSTRUCTION
AAMLIS 2

NOTE: COVER MATERIAL SHALL BE PLACED AT 2.5' MIN. DEPTH ONCE EARTHWORK-GRADEWORK AND LIME BARRIER. SEE CONSTRUCTION NOTES AND TECHNICAL SPECIFICATIONS FOR FURTHER INSTRUCTIONS AND REQUIREMENTS.

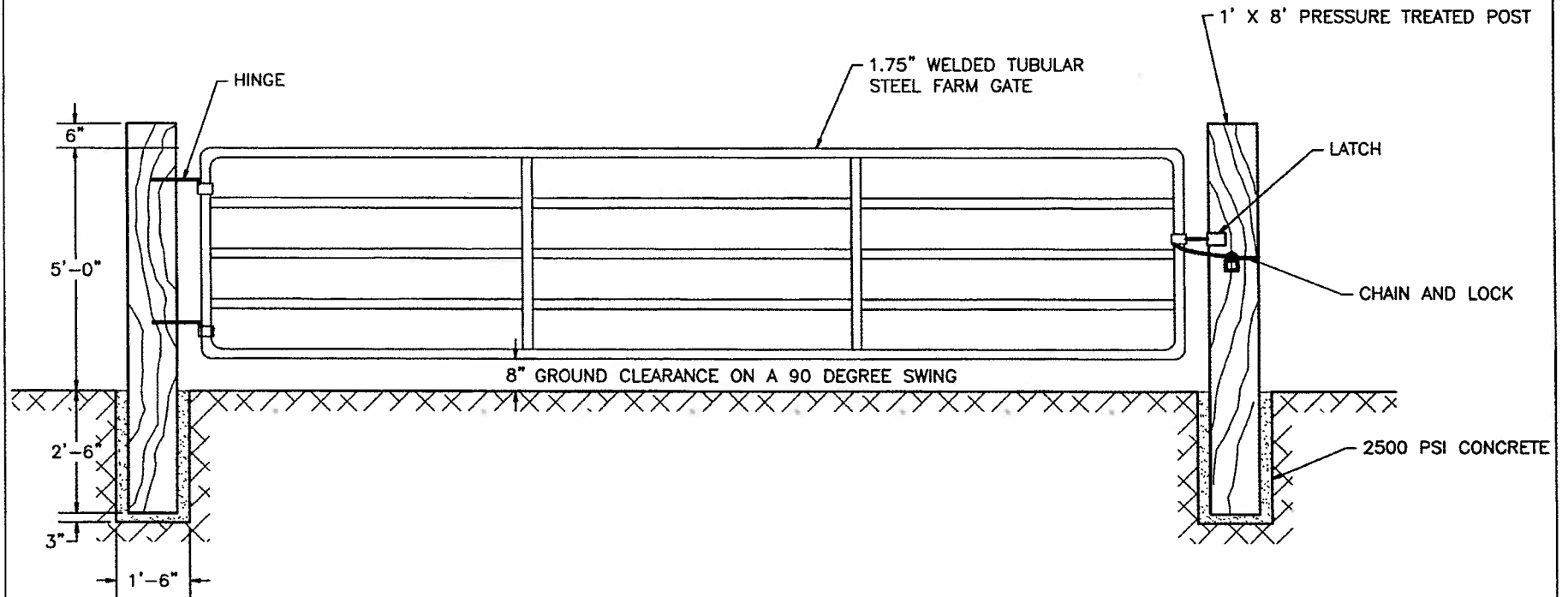
ALL MATERIALS EXCAVATED (EARTHWORK-GRADEWORK) SHALL BE USED TO STABILIZE SLURRY PONDS. UNDER NO CIRCUMSTANCES WILL SLURRY OR REFUSE MATERIALS BE PUSHED INTO WETLAND AREAS PURSUANT TO KY DIVISION OF WATER REQUIREMENTS.



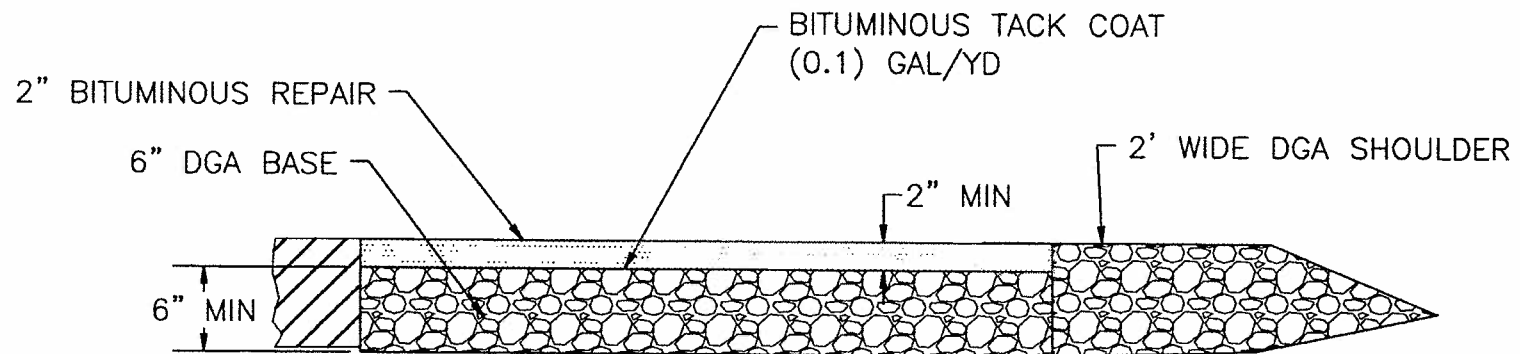
COVER MATERIAL PLACEMENT
AMLMS 3

NOTES:
USE HINGES, LATCH, CHAIN, AND LOCK AS RECOMMENDED BY THE GATE MANUFACTURER AND
APPROVED BY THE ENGINEER.

A MINIMAL AMOUNT OF FENCE SHALL BE REQUIRED ON EITHER SIDE OF THE GATE AS DIRECTED
BY THE ENGINEER. FENCE AND ALL HARDWARE SHALL BE CONSIDERED INCIDENTAL TO THE
CONSTRUCTION OF THE GATE.



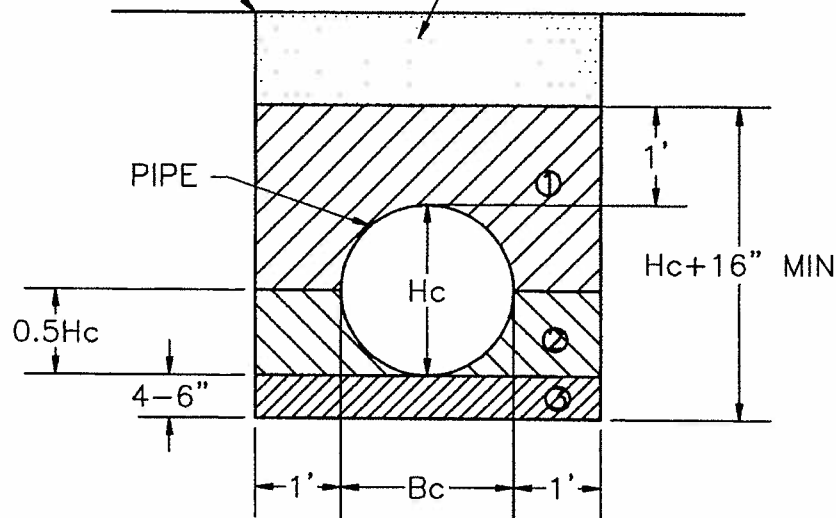
ACCESS GATE- 16' STEEL TUBE
AMLMIS 4



FLOWABLE FILL CONCRETE (1000 PSI HIGH SLUMP CONCRETE)
SHALL BE SUBSTITUTED FOR GRANULAR BACKFILL AS REQUIRED
BY THE ENGINEER.

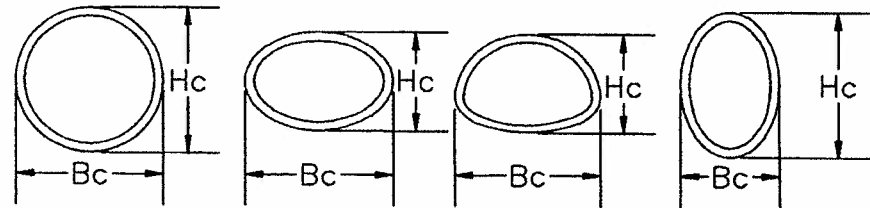
SUBGRADE

ROADWAY STONE OR COMPACTED SELECT SOILS AS DIRECTED BY ENGINEER

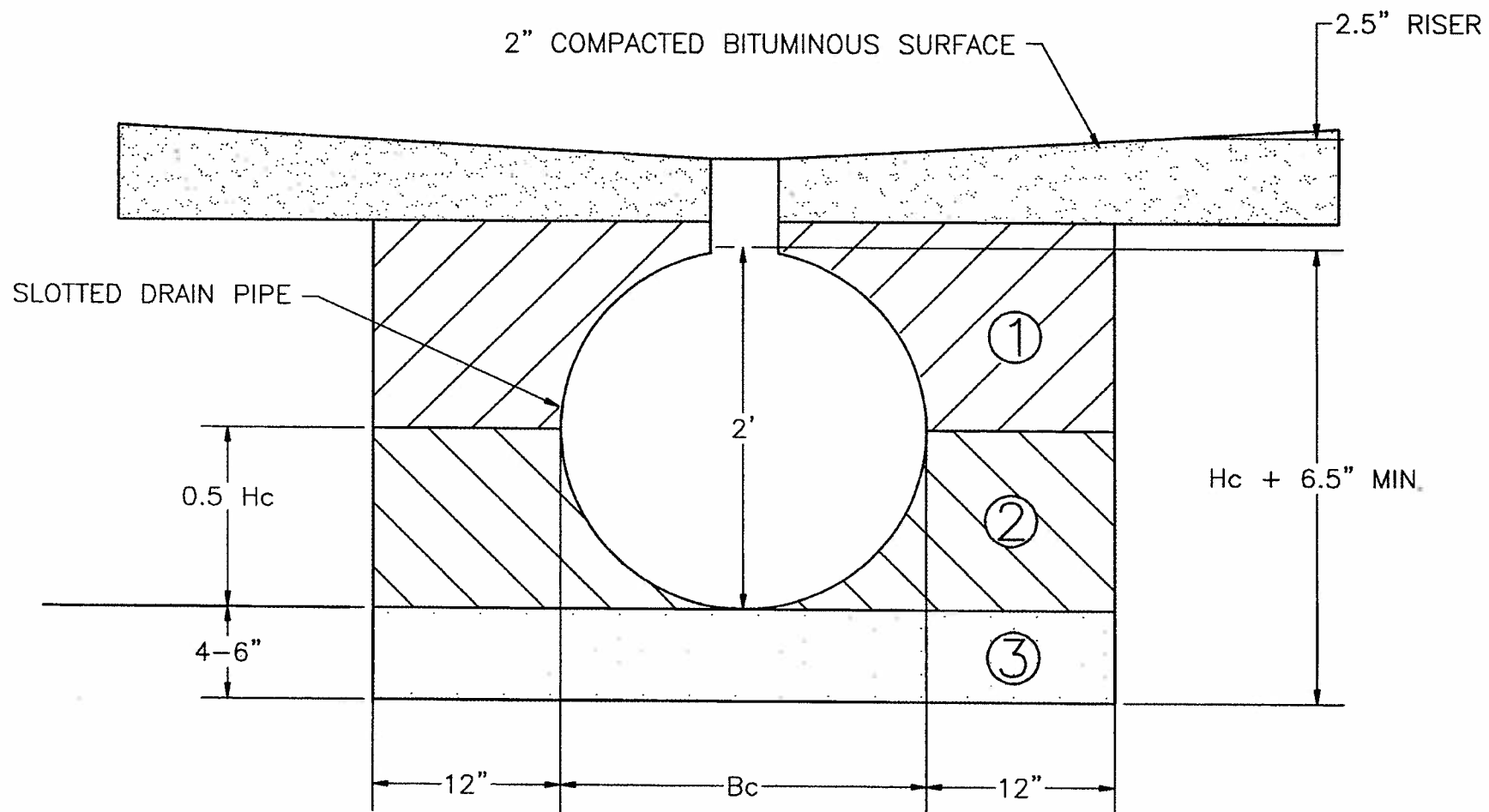


QUANTITY

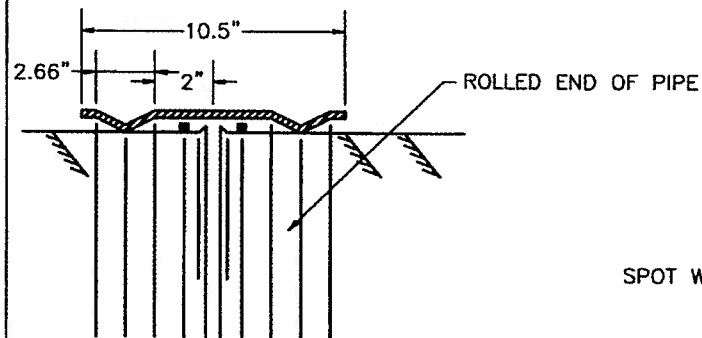
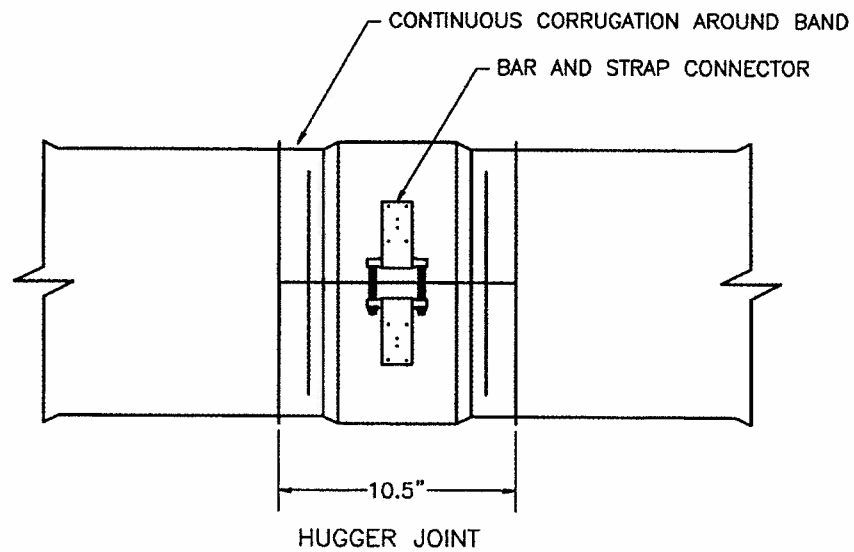
DGA = 0.44 TONS / LF (18" PIPE)
DGA = 0.54 TONS / LF (24" PIPE)
DGA = 0.65 TONS / LF (30" PIPE)
DGA = 0.77 TONS / LF (36" PIPE)
DGA = 1.03 TONS / LF (48" PIPE)



1. 85% COMPACTED DGA IN LAYERS 6" OR LESS TO WIDTH AND ELEVATION AS SHOWN W/ MECHANICAL TAMPERS OR COMPACTORS.
2. 95% COMPACTED DGA IN LAYERS 6" OR LESS W/ MECHANICAL TAMPERS OR COMPACTORS.
3. UNCOMPACTED DGA TO WIDTH AND ELEVATION SHOWN.
4. FLOWABLE FILL CONCRETE (1000 PSI HIGH SLUMP CONCRETE) SHALL BE SUBSTITUTED FOR GRANULAR BACKFILL AS REQUIRED BY THE ENGINEER.
5. HDPE PIPE MUST BE ANCHORED WITH GUY WIRE ANCHORS AND STRAPS OR EQUIVALENT PRIOR TO PLACING FLOWABLE FILL.

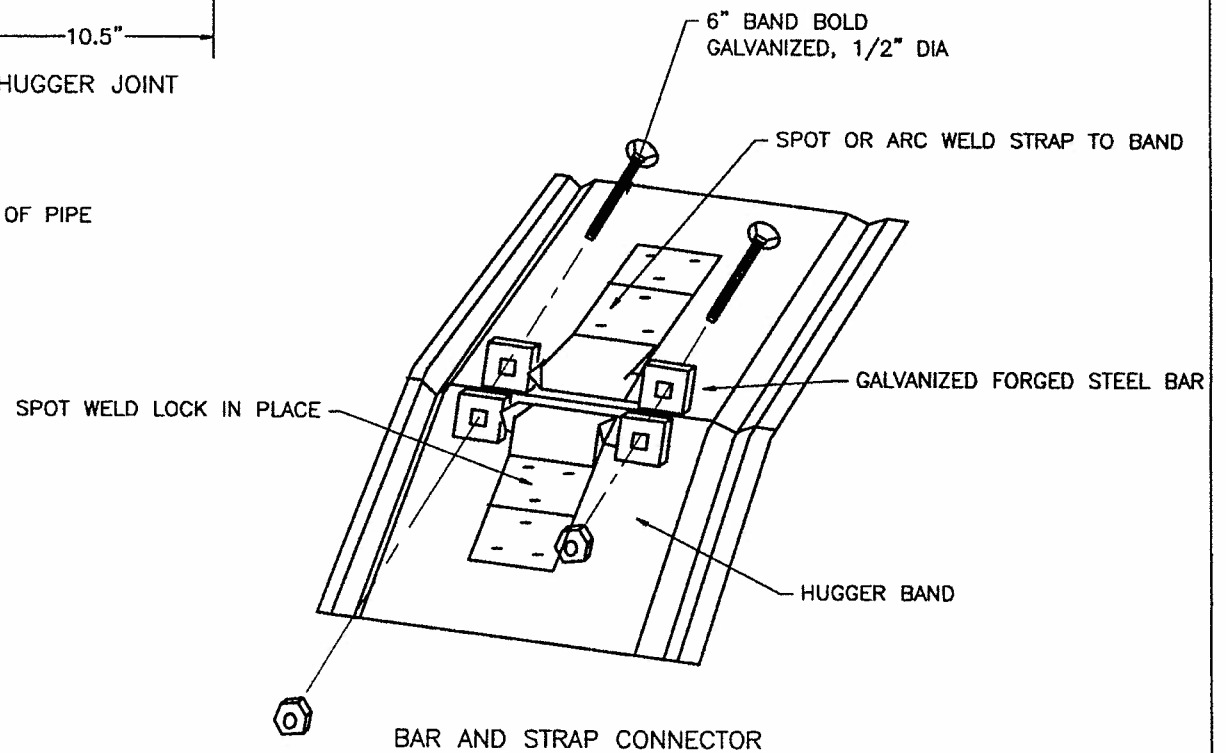


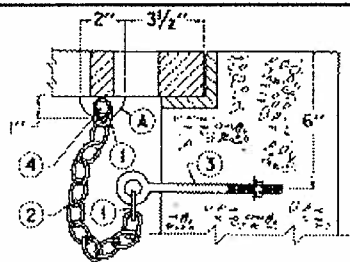
SLOTTED PIPE BEDDING
 AMLMIS 7



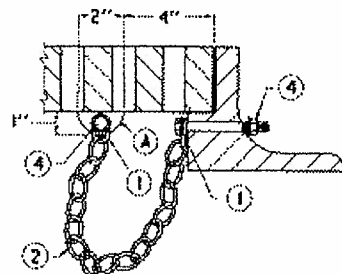
JOINT CROSS SECTION

O-RING GASKETS MAY BE PROVIDED FOR SPECIAL APPLICATIONS

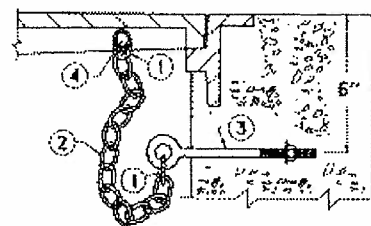




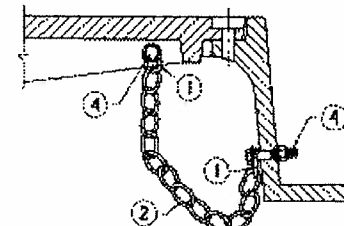
GRATE CONNECTED TO WALL



GRATE CONNECTED TO FRAME



LID CONNECTED TO WALL

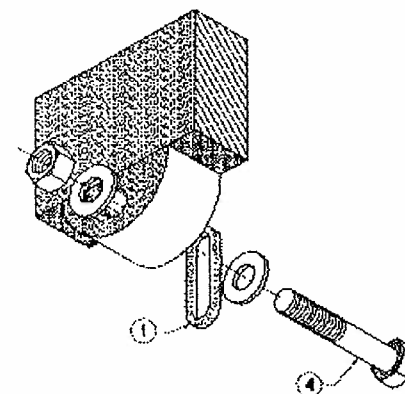


LID CONNECTED TO FRAME

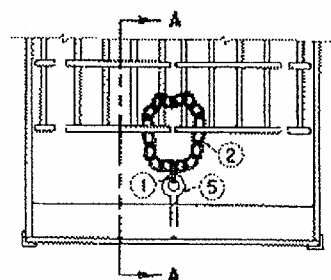
TYPICAL ILLUSTRATIONS FOR CASTINGS

NOTES

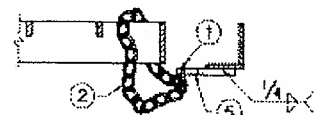
- ① CHAIN SHACKLE, OR COLD SHUT OF AN APPROVED TYPE.
- ② 3/8" PROOF COIL CHAIN OF SUFFICIENT LENGTH TO ALLOW REMOVAL AND DISPLACEMENT OF GRATE OR LID.
- ③ 3/8" X 6" EYE BOLT, NUT, AND WASHER.
- ④ 3/8" HEX HEAD CAP SCREW (GRADE 2), NUT AND WASHERS. LENGTH DETERMINED BY THICKNESS OF FRAME OR GRATE. 1/8" DIA. HOLE FOR CAP SCREW. BATTER THREADS ON CAP SCREW TO PREVENT REMOVAL OF NUT.
- ⑤ 3/8" EYE BOLT (LENGTH DETERMINED BY THE FRAME DIMENSION).
6. ALL EYE BOLTS SHALL HAVE A CONTINUOUS OR SOLID EYE.
7. ALL HARDWARE SHALL BE GALVANIZED AND OF COMMERCIAL QUALITY AND SHALL BE APPROVED BY THE ENGINEER.
8. THE COST OF THE COMPLETE SECURITY DEVICE, INSTALLED, SHALL BE INCIDENTAL TO THE COST OF THE STRUCTURE.
9. THE DESIGNS SHOWN ARE ACCEPTABLE; HOWEVER ARE SUBJECT TO CHANGE IF APPROVED IN WRITING BY THE ENGINEER.



① LUG ON CENTER CROSS MEMBER AND BOLT ASSEMBLY (AXONOMETRIC VIEW)

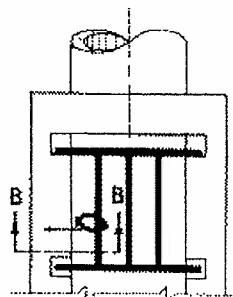


PLAN VIEW



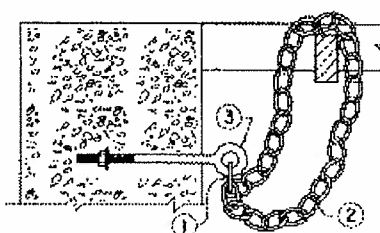
SECTION A-A

GRATE CONNECTED TO FRAME

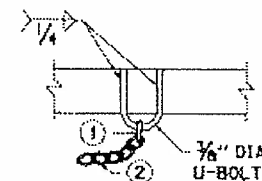


PLAN VIEW

GRATE CONNECTED TO WALL



SECTION B-B



ALTERNATE FOR STRUCTURAL STEEL MEMBERS

TYPICAL ILLUSTRATIONS FOR STRUCTURAL STEEL UNITS

SECURITY DEVICES FOR FRAMES, GRATES, AND LIDS

ASSEMBLY

1. LIFT THE SIDES, ENDS, AND DIAPHRAGMS INTO VERTICAL POSITION. (FIG. A.)
2. WIRE THE CORNERS OF THE PANELS AND DIAPHRAGMS TO THE FRONT AND BACK PANELS USING THE GAGE WIRE PROJECTING FROM THE CORNER OF EACH PANEL.
3. LACE ALL VERTICAL EDGES OF END PANELS AND DIAPHRAGMS USING MANUFACTURER'S APPROVED LACING WIRE. LACING SHALL BEGIN BY SECURING THE WIRE AT THE BASKET CORNER BY LOOPING AND TWISTING, THEN PROCEEDING ALONG EDGES BY LOOPING THE WIRE AT APPROXIMATELY 5" INTERVALS ALTERNATING BETWEEN SINGLE AND DOUBLE LOOPS, FINALLY SECURING THE WIRE BY LOOPING AND TWISTING AT THE OPPOSITE CORNER (FIG. C).
4. ALL VERTICAL EDGES SHALL BE SECURED BY LACING WIRE TO ANOTHER VERTICAL EDGE WHEN TOUCHING ANOTHER BASKET.

INSTALLATION

1. THE FOUNDATION SURFACE ON WHICH THE GABIONS ARE TO BE PLACED SHALL BE RELATIVELY SMOOTH AND EVEN.
2. GABIONS SHALL BE PLACED, WHERE POSSIBLE, FRONT TO FRONT AND BACK TO BACK TO EXPEDITE STONE FILLING AND LID LACING OPERATIONS (FIG. B).
3. ADJACENT GABIONS SHALL BE LACED ALONG THE PERIMETER OF ALL CONTACT SURFACES INCLUDING ANY UNDERLYING ROWS OF GABIONS (FIG. B).
4. GABIONS SHALL BE FILLED IN APPROXIMATELY 1' LIFTS. CONNECTING WIRES SHALL BE PLACED IN OUTSIDE CELLS AT ALL EXPOSED FACES AND FIRMLY WIRED (FIGS D AND E).
5. FILLED GABIONS SHALL BE STRETCHED TIGHT DURING THE LACING OPERATION TO LIMIT SHIFTING OF THE GABION STONE AFTER INSTALLATION.
6. ALTERNATIVE GABION UNIT FASTENERS MAY BE USED TO SECURE THE HORIZONTAL EDGES.
7. ADJACENT ROWS OF GABION UNITS SHALL BE PLACED SUCH THAT THE SEAMS ARE OFFSET.

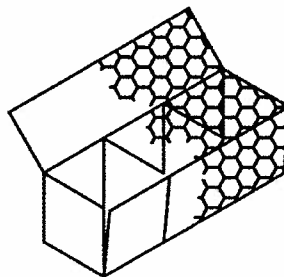


FIG. A

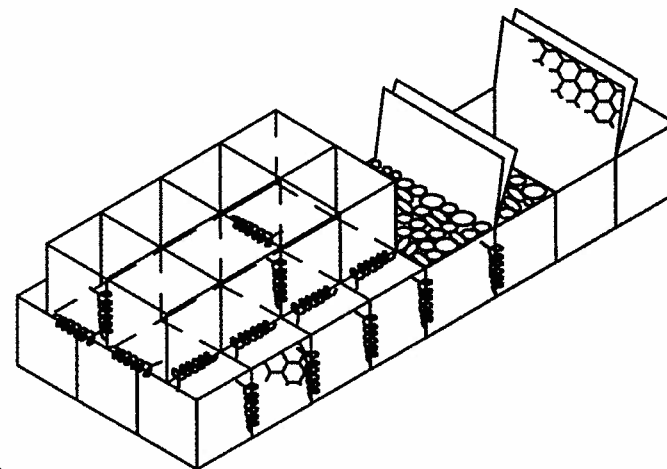


FIG. B

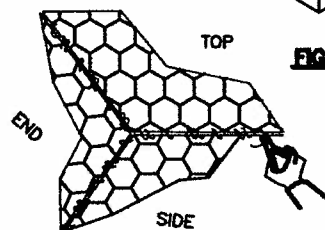


FIG. C

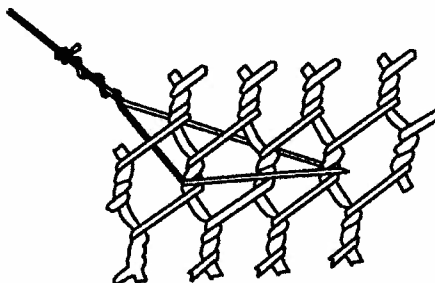


FIG. D

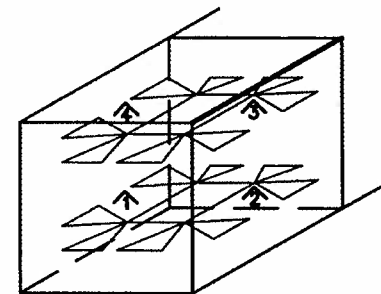


FIG. E